

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claims 1, 2 and 4 have been amended. New claim 5 has been added. No new matter has been added.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-5 are now pending in this application.

Rejections under 35 U.S.C. § 103

Claims 1-4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,271,520 to Tao et al. (hereafter “Tao”) in view of U.S. Patent No. 5,822,542 to Smith et al. (hereafter “Smith”). Applicants respectfully traverse these rejections for at least the following reasons.

Independent claim 1 is directed to an image recording apparatus and includes a “setting means for setting a return time and a recording time” and a “control means for reading out image date recorded over the set recording time starting at the set return time from the image data stored in the temporary storage portion, and storing such read out interval of the image data in the storage means when a signal based on inspection results outputted from the inspection means is received.” Neither Tao nor Smith disclose reading out image date recorded over a set recording time starting at a set return time from image data stored in a temporary storage portion, and storing such read out interval of the image data in a storage means when a signal based on inspection results outputted from an inspection means is received.

Tao discloses an item detection apparatus and method. The apparatus includes a near-infrared (NIR) camera 20, a mid-infrared (MIR) camera 22, and a digital image processing

system or processor 24 (see Figure 9). Defect detection and discrimination are performed by logically comparing images from the NIR and MIR cameras (see col. 6, lines 53-60). Figure 12 illustrates a packaging system where the NIR and MIR cameras and defect detection and discrimination system may be located alternatively at a number of different locations along the pack line (col. 6, line 61- col. 7, line 1).

The Tao system, however, in contrast to independent claim 1, is not for use in an inspection system which includes imaging means for imaging operations of manufacturing equipment in a production line, and an inspection means arranged downstream from the manufacturing equipment. Tao merely discloses that the pair of cameras (NIR and MIR) may alternatively be arranged at different locations along a pack line. At any particular location the NIR and MIR cameras are at the same location along the pack line, i.e. one of the cameras is not downstream to the other.

Still further, Tao fails to disclose or suggest as in claim 1, reading out image date recorded over a set recording time starting at a set return time from image data stored in a temporary storage portion, and storing such read out interval of the image data in a storage means when a signal based on inspection results outputted from a inspection means is received. Smith fails to cure the deficiencies of Tao.

Smith discloses that if an alarm condition is detected, video data stored in a ring buffer is copied into a permanent storage portion of a hard disk (col 40, lines 57-60). A pointer is then reset to the beginning of the ring buffer portion (col. 40, lines 60-64).

The Smith disclosure of copying video data from a ring buffer to permanent storage when an alarm condition is detected, and resetting a pointer to the beginning of the ring buffer portion is not a disclosure of “reading out image date recorded over a set recording time starting at a set return time from image data stored in a temporary storage portion, and storing such read out interval of the image data in a storage means when a signal based on inspection results outputted from the inspection means is received” as recited in claim 1. Smith does not disclose that his copied video data was recorded over a set recording time beginning at a set return time. Thus, even if Tao and Smith were combined, the combination would not suggest the features of claim 1.

Moreover, Tao and Smith, failing to disclose the control means as recited in claim 1, fails to suggest the advantage resulting therefrom. As disclosed in the present specification on page 6, paragraph 13, if the recording time interval is made too long, the amount of useless image data increases, and the check carried out after playback is complicated. The recited control means can avoid the complications of this useless image data by reading out image date recorded only over a set recording time beginning at a set return time, and storing that data. Tao and Smith fails to suggest this advantage of claim 1.

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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